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(54) KAMPER CABIN CARRIED ON TOP OF A VEHICLE

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ABSTRACT

A compacted cabin unit which adjusts to be carried on a vehicle top while compacted and can be opened and used for private quarters for people to eat or sleep therein, or for other camping activities on arrival at a stopping place on a journey, and importantly a unit which adapts to be carried on small or large vehicles including vans, pickups, wagons.

SPECIFICATIONS

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With the tremendous increase on leisure time, and the increase of the number of families which engage in camping as a form of recreations, an increasingly common sight on the highways has been the conventional house trailer and tent trailer coupled to the family vehicle and transported from campsite to campsite. When packed, the towed vehicle is usually sufficiently heavy to constitute a severe load on the engine of the towing vehicle, thus requiring greater amount of energy. Furthermore, the towed vehicle which extends rearward, constitutes a source of anxiety to the driver unless the driver is thoroughly experienced in driving a towing vehicle. In additions, towed vehicles are expensive and cannot be trailed into many places where the towing vehicle could go. Also seen on the highway are an increasing number of motor homes and kampers which are mounted on pick up trucks. All the above vehicles are expensive to buy, and operate, and generally are used only for camping. When not in use they have to be separately stored or left in the open, unprotected from the elements, and often in forbidden areas.

One objective of this improved invention is to provide a universal kamper unit which adapts to almost all vehicles and which provides a full enclosure, in compacted form, adapted to be carried on a vehicle to be transported to a destination for erection, or to be shipped while in a compacted form by other means, for distribution.

Another objective of this improved invention is to provide a quickly erected full enclosure, not a tent, which will provide security and protection from prowlers.

Yet another objective is to provide a new means to add two extra sleeping or usefull quarters one at each side of the erected kamper, or one extra quarters one shade verandah on the opposite side, or provide a



1033938

means to join the two pair of supports as a separate soft wall unit, separated from the kamper.

Still another objective of the improved invention is to provide a new means to support the unused kamper while compacted, with the supports extended wide enough to use the garage or housing conventionally, to permit the vehicle in or out without interruption. Thus providing the means to leave a compacted kamper on extended supports, or hung to the garage ceiling.

Still another object of the new and improved invention is to provide one only carriage which first supports the unit in transit and assists in positioning the unit for reload onto vehicle, and to remain on the vehicle top if required to be used as a luggage carrier, for transport of boat or luggage.

It will readily be seen that this improved invention is simpler to operate, more attractive and safer to load,,unload. transport. These objectives and others will become more apparent in the descriptions which follows.

Figure 1. is a view showing the compacted structure mounted on a vehicle for transportation to a site.

Figure 2. is a view of the structure of Fig. 1 viewed from the rear showing the rear window and trunk of carrying vehicle are not covered. It also shows the rear set of supports and at the sides and the one only carriage.

Figure 3. is a perspective view of the one carriage which carries the compacted unit.

Figure 4, is a composite view of the whole set of rear support assembly, which serves to show the front set and the rear set as identical due to adjustability.

Figure 4B. is a fragmentary view of two support member top parts which sleeve fully one into the other. Both being sleeved within a tubular housing is attached to under side of roof shell. This identical assembly attaches to the opposite ends of roof shell.

Figure 5A, is a fragmentary view of one support leg with attached ground pad, an anchor means for retaining and supporting them in part

onto one of any of the four vehicle fenders, with scuff proof and attaching means.

Figure 5B is a two hook like support retaining member, clamping the said support to the one of the four fenders. This view represents the same means for the four support members.

Figure 6 is a schematic view of the kamper unit with the vehicle away, the supports sufficiently for illustration, extended to show side distance for vehicle to be removed. The kamper sides are in process of being lowered for erecting.

Figure 7 is schematic view of the kamper roof shell with the end panel members partly lowered to be later assembled.

Figure 8A is a side view of the roof shell showing the ends folded and one side hinged above the other.

Figure 8B is a fragmentary corner section view of two adjoining parts of the end and the side panel member with sealing and anchoring means.

Figure 9 is an overall view of the erected kamper, and shows the four supports with frame like assembly which have been raised and supported by other means.

Figure 10 is a end view of either the front or rear of the roof shell and shows the sequence of the side panels attaching.

Figure 11 is a view of device which engages a bumper or simulating thereof on a vehicle, to the bumper type jack.

Shown in Fig. 6

12 the roof, 23, 27, 13, 15, the extended supports, resting on the ground supporting the unit. sides showing being lowered to make erect. 35 is top panel on one side with hinging applied at the top under the shell 12. 36 is the next panel hinged to 35. An outward motion is first and then 36 swings down to the ground to vertical position. 34 and 37 on the opposite side is the same. This leaves the two ends exposed.

Turning to Fig. 7

38 is the centre panel on which the wing panels fold, one directly over the other. 43 is one wing, 42 the other. Both are hinged vertically on the centre panel 38. Shown on the opposite side 39 is the center panel,

22 and 24 similarly folded one over the other. One panel requires a slightly offset hinging to permit overfolding.

Fig. 8 A is next

This side open view shows panels 38,43,42, folded on the one side, and 39,40,41 on the opposite also folded. Then ends are reduced to slightly less than the width of inside shell 22. 44 and 45 are cupboard doors at each end beyond the places where the sides outward travel. Said cupboard doors are reached from inside the erected kamper through provided recesses at the top of each center end panel.

Fig. 8b below inset

51 is a pincer type small clamp tightened with a thumb screw. The ends of pincers 51 enter provided reinforced hole in panel 42 and 35. 46 is a weather seal.

Fig. 8 B represents any of the corners where the Kamper is wall to wall joined and as many of pincers 51 are used to join and seal. (Protrusions on walls would scuff each other and take up inside shell space.) Going now to Fig. 9

a fully erected kamper with the supports components 13,18, raised and extended to make framework for soft wall structures on each side for shade or living.

46B indicates fasteners inside on panels to fasten carpet all around above the floor level.

The erected cabin shown in fig. 9 has wall sections all around locked at corners inside with a number of pincers 51 and also sealed with material 46. (fig. 8 B) side and end panels as explained in figures 6 and 7 I.E. folded and hinged panels are all connected and sealed at the corners and the unit is self stabilized and can permit the supports to be removed or reused.

In Fig. 10

12 is the rear of Shell, 37,34,35,36, are the side panels hinged and nestled within the shell 12 near the bottom and go below the end component panels. The panels 37 with 34 go above the lower panels so they have to be above in the shell and yet swing outwards at the same point on the opposite side as 35,36. 47 represents and shows a double hinge which permits panel 34 to swing to 37 panel, both swung up and then raised on the

second pivott point on hing 47.

1033938

-5-

Fig. 11 shows

a device which adapts and assists the kamper unit while on the vehicle to be raised at one end first and then the other end.

49 is a flange which engages with a bumper or simulation thereof.

50 is a place to engage a vehicle jack in order to actuate the raising.

After the vehicle with kamper unit is parked at a stopping place, where the kamper is to be removed from the said carrying motor vehicle, the roof shell and contents are released from the carriage 19, the supports on all sides (13) are released from the saddle components shown in fig. 5a and 5 b and also stretched outwardly on each side to give sufficient drive out space for the said motor vehicle, and the supports 13-27 then are lowered to ground where ground pads 15 engage with ground. Detachable easily mounted braces (not shown) are employed to stabilize the unit at placed where they will not impede kamper erection, or vehicle drive in or out. Cross members 18 in fig 2 may be unnnixed at one side by removal of loose pin and swung away, (one or the other as required,) and or taken away to make supports for end extensions, after the cabin has been erected.

The adaptor for vehicle jack is then applied to one end bumper and the jack engaged and actuated to raise that end of the vehicle, with Kamper unit on carriage, to needed height. Supports 13-27 now extended to ground are locked by screw means provided. The motor vehicle is now lowered to ground at that end, leaving the kamper unit supported by supports 13-27 anchored to roof shell, as shown in fig 4a and 4b. Saddle unit more aptly seen in 4-a 5a and 5b which comprises cable or ribbon with pads 28-30, and double hook 29, remain on the motor vehicle, unless later removed.

We now have the Kamper unit tilted with one end on the carriage and the other raised. By applying the same movements the second time, the remaining kamper end is also raised, the Vehicle may now be removed. For example, one end of vehicle is lifted and the supports

1033938

-6-

take the weight of the kamper. Then the other end is raised and held on supports, whereby the carriage is below the kamper shell.

With said vehicle removed we lower side panels 35-36 so that panel 35 is swung outwardly until becoming vertical, with panel 36 angled, as seen in fig. 9 and in fig 6, and 10. Next, we lower side panels 37-34 untill outwardly stretched. Both sides of said kamper look like the positions shown in fig 9.

180

One end three piece panels are lowered next and fitted to sides, as seen in fig 9, 7 and 8a, and then the opposite panel is lowered and fitted, All the corners are pulled together and secured with seal between the panels by pincer means seen in fig 8b-51 figs 7-8a-8b give illustration.

From the foregoing it will be obvious that the improvements which are-two panel sidewalls, one carriage only, roof shell positioning means, better arrangement for supports use for extra space soft walls, unit raising method, more convenient and attractive positions of the support members at the sides, the adaption of a vehicle jack, generally available.

190

To reload on vehicle, extend the four support legs outwardly, extend them vertically to the ground with the pads on, lock them in position, then fold and raise the walls to within the roof shell in return sequence. Drive the vehicle underneath to receiving position, raise the vehicle at one end, which at the same time will then support that end of roof shell. Lower that end of vehicle with roof shell after those end two supports have been unlocked. Repeat the raising and lowering of the other end in like manner. Adjust the position of the compacted cabin shelter on the vehicle and reattach support members, secure unit on the vehicle to transport elsewhere.

200

-6-

I Claim:

1033938

-7-

1. A shelter unit adapted to be transported to a site for erection, said unit comprising:

a roof shell;

four sidewalls nested in said roof shell, in sequence, two of which said sidewalls comprised of two hingedly connected parts, and two of which are comprised of three hingedly connected parts, and each of the said sidewalls being hingedly connected to the underside of said roof shell, and lying on one another while confined in said roof shell prior to erection;

means to support said shelter unit on a motor vehicle, said support means including:

side support means attached adjacent to the front sides of roof shell detachably connecting said roof shell to front sides portion of said motor vehicle;

side support means attached adjacent to a rear side of the said roof shell detachably connecting said roof shell to rear sides portion of said motor vehicle; and means carried on the roof of said motor vehicle for supporting said roof shell containing said sidewalls.

2. A shelter unit of claim 1 including means to carry said roof shell and sidewalls contained therein, said means including,

a top carriage comprising:

a detachable frame, means on said frame to rest and secure said frame on said motor vehicle top;

means on said top carriage frame for adjusting and guiding said roof shell and contents to position onto said motor vehicle carriage.

3. A shelter unit of claim 1 including means to support said shelter unit, said support means comprising:

length adjustable support members which transfer a portion of the said roof shell and contents weight to portions of the said motor vehicle,

said support members detachable from said roof

1033938

shell and said portions of said motor vehicle.

4. A shelter unit as in claims 1,2 and 3 including a saddle unit which is comprised of: means to carry a portion of the said roof shell and contents detachably and adjustably attached to a portion of said motor vehicle;

means to protect said portion of said motor vehicle against scuffing.

5. Side support means as in Claim 1 and Claim 3 whereby said support means support said roof shell containing compacted sidewalls, wherein said support means adapt to expand outwardly and vertically, providing space for ingress or exit of said motor vehicle freely within a building or elsewhere.

6. Side support means as in Claim 1 wherein said side supports adapt to provide a frame extension on ends of said roof shell, or separated frame for softwall shelter.



INVENTOR.
WILLIAM GREENHALGH FIG. 1.

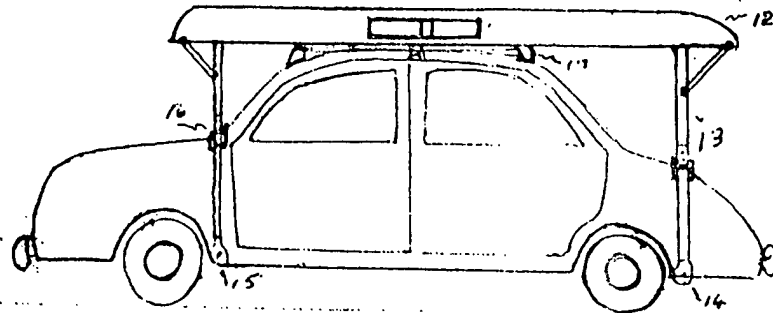


FIG. 2.

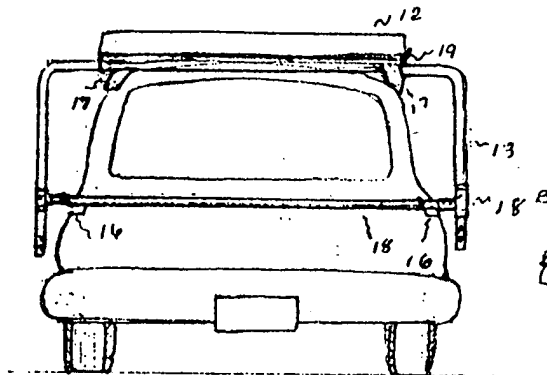


FIG. 3.

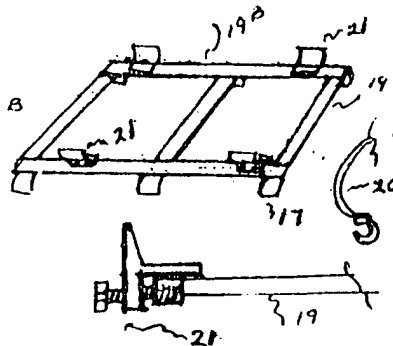


FIG. 5. A.

FIG. 4. A.

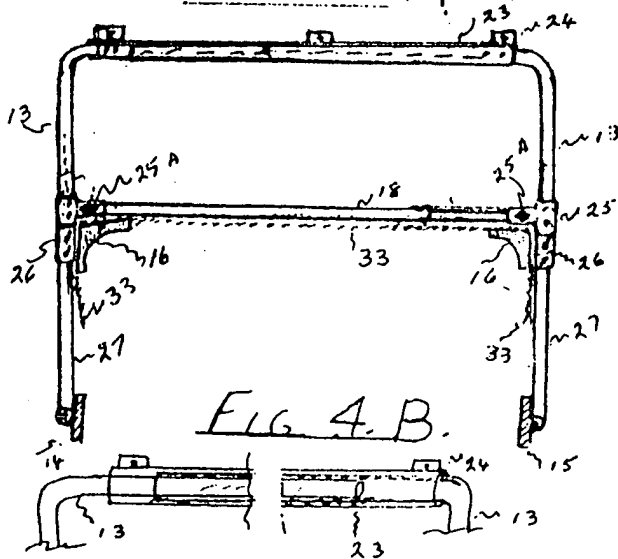


FIG. 4. B.

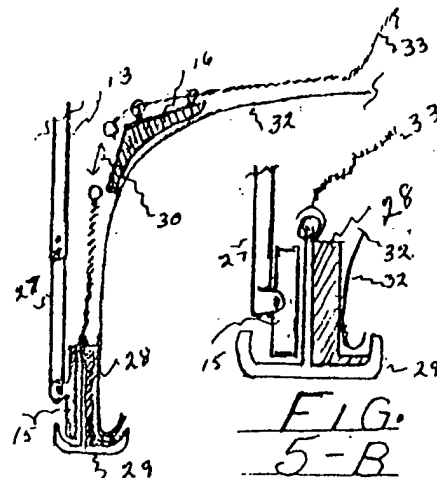


FIG. 5-B

FIG. 6

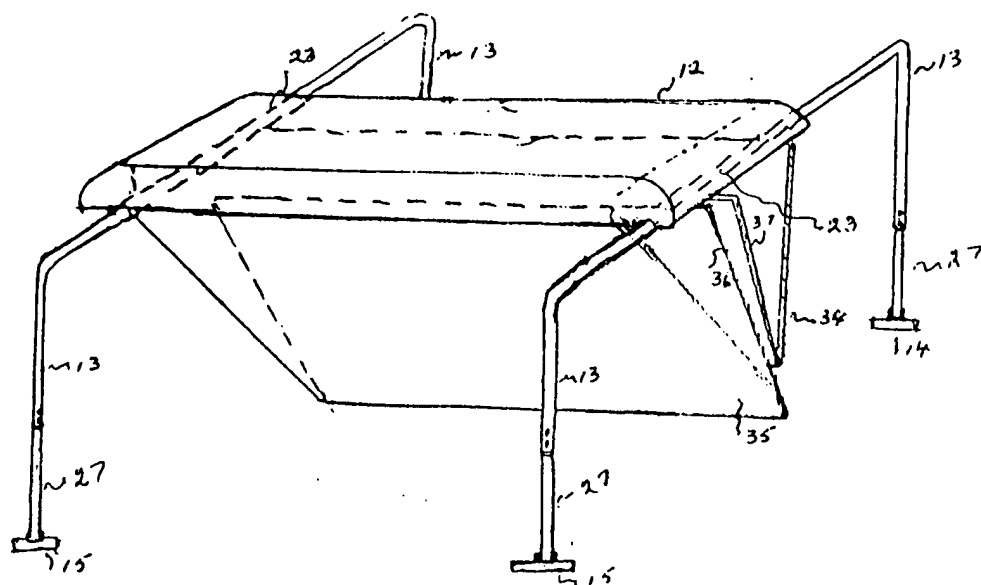


FIG. 7.

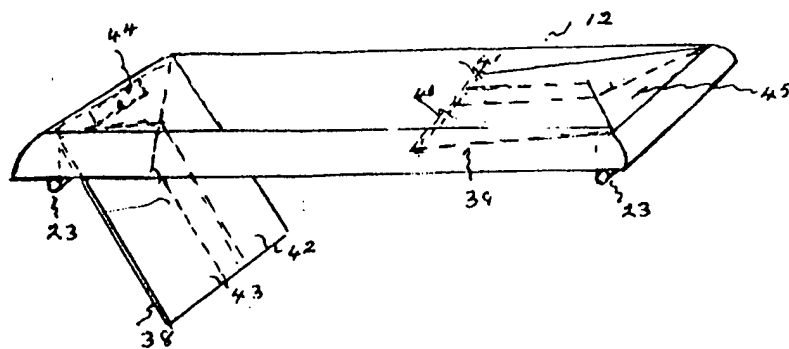


FIG. 8. A.

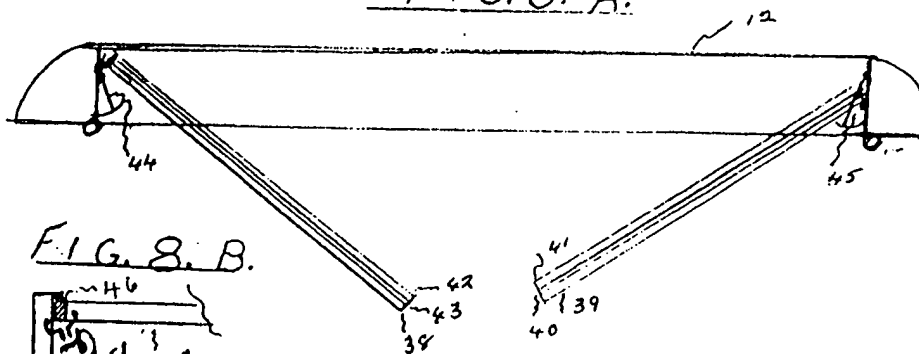
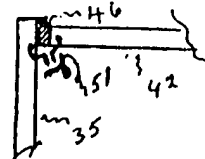
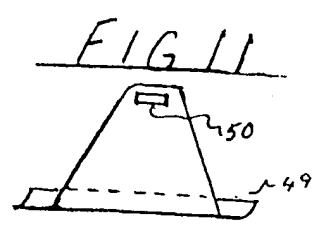
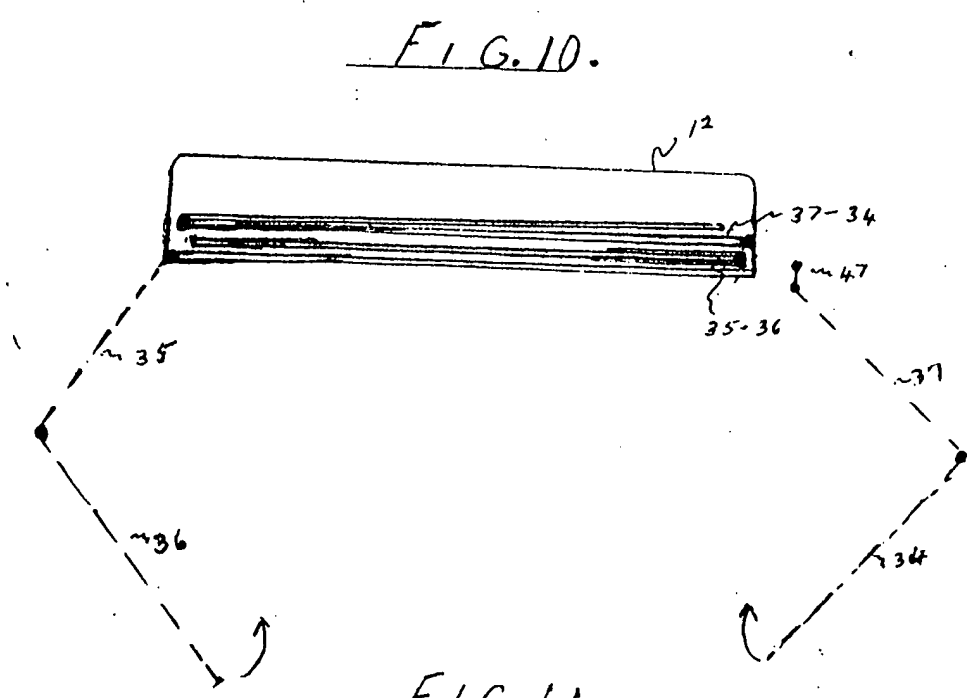
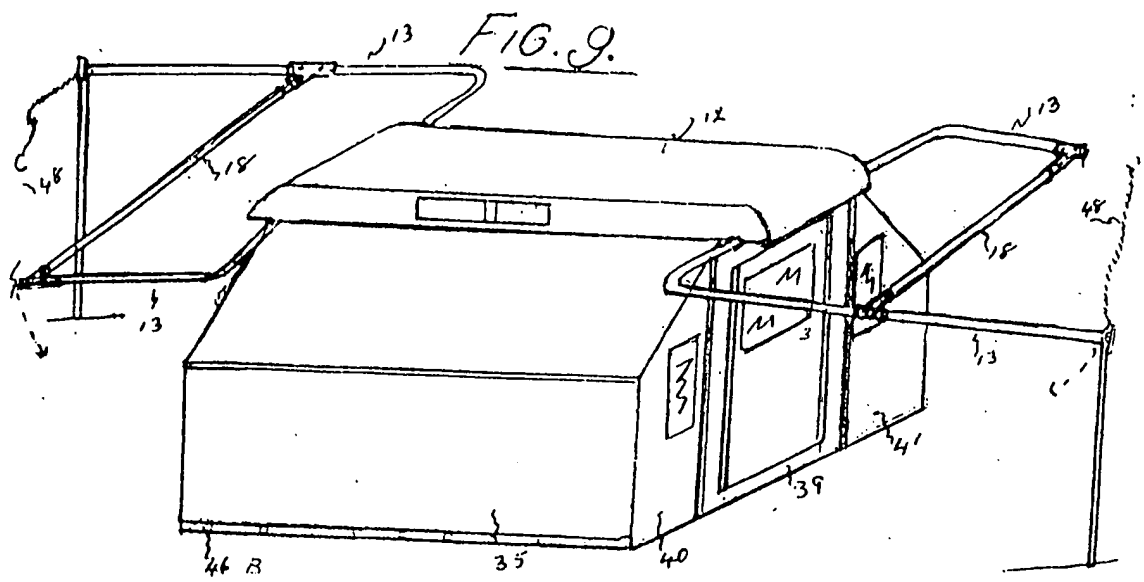


FIG. 8. B.



W. H. H. H. H.



G. L. ...